



Significant Incident Summary No. 1

Worker suffers burn injury from aerosol can dropped in deep fryer

Summary of incident

In August 2022, a worker in a cafe kitchen suffered burns when an aerosol can of cooking oil was inadvertently dropped into a deep fryer of hot oil.

The aerosol can had been placed on a trolley next to the fryer. The worker had been working near the deep fryer and the aerosol can fell into the deep fryer without her knowledge. The worker walked past the fryer just as the aerosol can ruptured and was burnt on the face and neck. Aerosol cans store contents under pressure. In this case the heat of the oil in the fryer was sufficient to cause the rupture of the aerosol can.

A similar incident occurred in 2010, when an aerosol can of cooking oil exploded, injuring two chefs.

The aerosol can was placed on the kitchen work bench next to lit gas burners. The propellant inside the aerosol can heated up and expanded. The base of the can blew out, releasing the propellant which was ignited by the gas burner resulting in an explosion. Both chefs received flash burns to their upper bodies, and a large window at the front of the cafe blew outwards.

Contributory factors

- The aerosol can was placed on a trolley in an area close to a heat source where unintended movement resulted in the aerosol can being knocked into hot oil and rupturing about 40 seconds later.
- There were no baffle plates on the trolley to reduce the risk of items being knocked off.
- Propellants in aerosol cans are often hydrocarbons stored under pressure. Hydrocarbons are flammable and should be kept away from extreme heat and any other type of ignition source.

Managing hazards and risks

The following control measures should be considered when using aerosol cans in commercial kitchens, restaurants and cafes:

- eliminate aerosol cans from kitchens where practicable. For example use a manual spray pump to dispense oil and store insecticides in a separate store room

- consider installing baffle plates on trolleys that are used near deep fryers to reduce the risk of items being knocked in and splashing hot oil
- do not use or store aerosol cans next to heat sources, in direct sunlight, near ignition sources, or in hot areas of the workplace
- read the safety information on the aerosol can and refer to the safety data sheet
- ensure workers are aware of the hazards of aerosol cans and how to use them safely.

Further information

Visit www.worksafe.wa.gov.au for more information on workplace health and safety.

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